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ABSTRACT

A pilot project demonstrated that cooperative training programs are effective and cost efficient for small businesses. Common entry-level reading and thinking tasks were identified in a variety of occupational areas. Five growing occupational areas were identified: industrial/machine operator; health care; food preparation; hotel/hospitality; and housekeeping/maintenance. Data were collected on 43 entry-level jobs in those occupational areas, and job duties and materials were analyzed to determine the required skills. Vocabulary schematics, reading, and thinking tasks were identified across occupational areas. Common tasks were matched with innovative instructional techniques and incorporated into a classroom using the functional context approach. A pilot group of 15 students were taught using techniques from the literacy task analysis and actual workplace materials. Pre- and post-tests indicated that these techniques were effective. (Eleven references are attached, and seven appendices containing the following are included: sample newsletter, flyer, and sample letter contacting employers; occupational areas by company participation, employer names, and job categories; data collection forms; general vocabulary schematics, reading and thinking tasks; instructional techniques, seven-item bibliography of materials, and student survey form; participating employers report; and cover letter from participating employers report.) (NLA)

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THINKING AND READING FOR ENTRY LEVEL WORKERS

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1990-1991

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ALLENTOWN LITERACY COUNCIL

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ABSTRACT

This project identified the reading and critical thinking skills needed by entry level workers in the Commonwealth of Pennsylvania in selected occupations. Recognizing the desirability of integrating these essential reading and critical thinking skills into a workforce context, it was also recognized that developing a completely customized workplace program for every person seeking basic skills enhancement geared toward job success was impractical. The solution was to identify those reading and critical thinking tasks which were common to entry level positions in a variety of occupational areas. With the help of the Office of Employment Security, the Council identified five growing occupational areas in the Commonwealth: Light Industrial/Machine Operator, Health Care, Food Preparation, Hotel/Hospitality, and Housekeeping/Maintenance. Data were collected on 43 entry level jobs in these occupational areas, and job duties and materials were analyzed to determine the required reading and critical thinking skills. Vocabulary, schematics, reading tasks, and critical thinking tasks were identified across occupational areas. The common vocabulary, reading, and critical thinking tasks were matched with innovative instructional techniques and incorporated into a classroom.

This project will be of interest to adult educators and teachers who are working with employees from many different businesses, to adult education project advisors in state departments of education, to literacy councils, literacy programs in community colleges, and to adult educators in public schools. Employers and employees will also be interested in the project as a way to determine the relevance of adult education classes to their workplace needs.

INTRODUCTION

The THINKING AND READING FOR ENTRY LEVEL WORKERS Project is innovative in that it looks at essential skills needed at a particular job level, the entry level, across a number of occupational areas in order to identify vocabulary, reading, and critical thinking tasks common to that level in all of the occupational areas. While vocabulary, reading and critical thinking tasks specific to each occupational areas were also identified, the primary focus was on combining the common tasks with effective teaching techniques to develop group basic skills instruction with a strong workforce emphasis. The group instruction is workplace specific without being limited to one specific company or occupational area. At the same time, the capability to create a customized program for a particular business or occupational area remains if the provider so desires.

Dr. Linda V. McCrossan, Executive Director of the Council and Project Director, recognized the need across the Commonwealth for group instruction which would address the workforce specific skills of entry level workers from different businesses which included reading and critical thinking skills for those with low literacy levels. Analyses of literacy tasks needed to be done for more than one business at a time. Therefore, the goal of the project was to gather information on entry level positions

relative to the thinking and reading demands, and to integrate them using appropriate, instructional techniques into one of The Allentown Literacy Council's classes. Patricia O. Richards, Project Manager, with the assistance of the Office of Employment Security and the Allentown-Lehigh Chamber of Commerce, developed a list of twenty small and mid-sized employers. She then visited with these twenty employers and compiled and analyzed the job duties of forty-three entry level positions in five growing occupational areas across the Commonwealth. Vocabulary, reading, and critical thinking skills for each occupational area were identified and documented. Instructional techniques for teaching these skills were developed. The techniques for teaching the requisite reading and critical thinking skills were piloted in a group class of 15 students most of whom were at low literacy levels (0-4). Cynthia Garrett, Director of Adult Basic Skills Programs and Project Coordinator, worked with the instructor who is a professional staff member to survey the students regarding their needs and to implement the teaching techniques and materials. The project covered the time period from early September, 1990 to late May, 1991. The results of the project were reviewed in June, 1991 and the final report was written.

The Allentown Literacy Council would like to thank the Pennsylvania Department of Education's Division of Adult Basic and Literacy Education Programs, Commonwealth of

Pennsylvania, for its support. Copies of this report may be obtained from AdvancE for the next five years. The address of the Pennsylvania Department of Education and AdvancE is 333 Market Street, Harrisburg, Pa. 17126-0333.

A. STATEMENT OF THE PROBLEM:

Two thirds of all workers are employed in small businesses which lack the resources to develop on-site, job-specific literacy training. Yet these very same businesses hire entry level workers with less formal education than those in large businesses. For many companies, training for these workers is not just an enhancement but a matter of survival (Szabo).

Many of the students who seek literacy instruction are interested in improving their basic skills in order to obtain employment or to upgrade their employment prospects. It is impossible for literacy providers to design customized workforce programs for each individual seeking basic skills instruction and yet, for the instruction to be of optimal value to the student, it must be functional and specific to the student's needs (Sticht, Hunter & Harmon).

This project, THINKING AND READING FOR ENTRY LEVEL WORKERS, was undertaken in an effort to deal with the dilemma just described. Workers from small businesses will most likely be taught in group instruction because this is the most efficient way to meet the growing demand for basic skills instruction, but they also will need workforce specific skills. Group instructional techniques are needed which address the need of specific workers from different businesses. An analysis of literacy tasks needs to be conducted for more than one business at a time.

Adult educators must be able to teach critical thinking skills for low level literates at the same time they teach basic reading and writing skills and these basic skills need to be integrated into a functional context.

B. GOALS AND OBJECTIVES OF THE PROJECT:

The goal of this project was to gather information on entry level positions relative to the thinking and reading demands of those positions, and to integrate them using appropriate instructional techniques into one of the Allentown Literacy Council's small group classes.

The four objectives for the project were: 1) to analyze sample reading materials and job duties for entry level workers from a minimum of five different categories of businesses to determine the specific technical vocabulary, reading, and critical thinking skills needed by the types of businesses, 2) to develop innovative instructional techniques to teach vocabulary, reading, and critical thinking skills in each type of business to students in group instruction, 3) to document the specific vocabulary, reading, and critical thinking skills needed for entry level workers in the five categories of businesses, and 4) to document the successful, innovative instructional techniques and appropriate classroom material.

C. PROCEDURES:

With the help of the Allentown Office of Employment Security and the Allentown-Lehigh Chamber of Commerce, growing occupational areas were identified. The occupational areas selected were: Light Industrial/Machine Operator, Food Preparation, Health Care, Hotel/Hospitality, and Housekeeping/Maintenance. Small and middle sized businesses in these areas were then identified and contacted by mail, telephone, and through the Chamber of Commerce Newsletter (See Appendix A). The goal was to have at least five businesses from each of the five occupational represented in this project. Because of a positive response from the business community and of the overlap of occupational areas in some businesses, this goal was met in all categories and exceeded in four of them (See Appendix B).

Interviews with all twenty businesses were conducted using data collection forms adapted from those used by Rush, Moe & Storlie (See Appendix C). Information about the nature and demands of the job tasks were gathered along with job descriptions, and job-related materials. A Literacy Task Analysis was completed so that workforce specific skills could be identified and incorporated into the classroom (Drew & Mikulecky, Askov). The data were analyzed for vocabulary, reading tasks, and critical thinking tasks for each entry level position in each

occupational area. Schematics were included as a type of reading task. The vocabulary, reading, and critical thinking tasks were classified (Pratzner, Smith, Wiant, Bloom) by occupational area (See Appendix D). Instructional techniques and appropriate materials were developed from the Literacy Task Analysis data. The pilot group consisted of 15 students in a PDE 321 class. These students were either in entry-level positions trying to learn the skills needed to keep their jobs or were unemployed and seeking to enter the job market. Most of the learners were between a zero to four level of literacy. In order to incorporate the workplace skills into the classroom, it was essential that the teaching techniques be compatible with a functional-context methodology approach. For this reason the following techniques were selected: using direct instruction to introduce each lesson; dividing a process into procedural steps; modeling of each process by the teacher first and then by the group members; using demonstration and "think aloud" through each step of a process; and encouraging metacognitive strategies such as self-questioning and mental activity monitoring (Appendix E). These instructional techniques closely mirror instructional techniques of on-the-job training. The teacher surveyed the students to determine which tasks were most important to them. She then used a combination of materials collected from The Literacy Task Analysis and

materials brought in by the students themselves to construct the lessons. It was important to the students who were employed to be able to use their own materials for practice because the transfer of learning from the classroom to their workplace was ensured, and the skills they learned were immediately applied in real-life situations. Therefore, it is strongly recommended that actual workplace materials supplied by the student be used whenever possible. A bibliography of some commercial materials which were useful is contained in Appendix E. This is not a comprehensive list, but rather a sampling of materials used in this project which met the needs of the teacher and students and which were readily available. The teacher conducted an assessment of students' performance levels prior to each lesson or module using the diagnostic interview procedure developed by the Council and sample tasks. The same was done after the completion of each lesson or module. These pretests and posttests indicated that the instructional techniques were effective.

D. and E. OBJECTIVES MET AND RESULTS:

All four objectives of the project were met or exceeded.

Objective 1: To analyze sample reading materials and job duties for entry level workers from a minimum of five different categories of businesses to determine the specific vocabulary, reading and critical thinking skills needed.

To accomplish this objective, Patricia Richards visited with each participating employer. Entry level workers were observed performing their jobs. Workers, supervisors, owners, and/or human resources specialists described the jobs in detail. The workplace reading materials including the content on signs and instructions on machinery and products were reviewed and evaluated. Job description components were categorized into reading tasks and critical thinking tasks. Vocabulary lists were developed. The reading and critical thinking tasks for the 43 jobs were classified using the system developed by Philippi (1989) based on the research by Pratzner, Smith, & Wiant.

Objective 2: To document the specific vocabulary, reading and critical skills needed for entry level workers in the five categories of businesses. The vocabulary was documented in two ways. Vocabulary specific to the occupational category was listed as such. Additionally, the vocabulary common to entry level positions across all occupational areas was recorded separately under the headings "Safety Vocabulary" and "Policy and Procedure

Vocabulary". The reading tasks were divided into two categories: schematics and reading skills. The rationale for this was that schematics present a different type of reading challenge than does ordinary text. Schematics appear frequently in the workplace situations and according to the employers interviewed, often present serious difficulties for employees. The critical thinking tasks were documented as thinking skills by occupational area. Appendix D contains the safety and policy and procedure vocabulary common to all the occupational areas and the list of the reading, critical thinking and vocabulary by each occupational area.

Objective 3: to develop innovative instructional techniques to teach vocabulary, reading and critical thinking skills in each type of business to students in group instruction.

The research shows that a functional-context approach is best for the learning and retention of basic skills (Sticht, Hunter & Harmon, Philippi, Askov, and Carnvale et al). Therefore, methods and techniques were sought out which would be most closely related to and compatible with the functional-context approach. These techniques, some of which are used in on-the-job training, are using direct instruction to introduce each lesson; dividing a process into procedural steps; modeling of each process by the teacher first and then by the group members; using demon

stration and "think aloud" through each step of a process; and encouraging metacognitive strategies such as self-questioning and mental activity monitoring. Simulations of actual situations in which the skills selected to be taught would be used were developed, and whenever possible, actual materials from the student's own workplace were used. Students were surveyed to find out which of job tasks and attendant critical thinking and reading tasks were most important. Lessons were developed from the students' responses. For example, completing job applications was in demand as was filling out time sheets. Reading bus schedules was another (See Appendix E).

Objective 4: to document the successful, innovative instructional techniques and appropriate classroom material.

The techniques all appeared to be successful as evidenced by the pretests and posttests, and by eliciting feedback from the students. It must be noted that not all techniques were used in all lessons or with equal frequency so it is not possible to state that one technique was superior to all of the others. The techniques need to be used alone or in combination situationally depending on the lesson and the students.

LIMITATIONS:

Following are the limitations of this study.

Not all jobs are the same from company to company even though jobs may carry the same title.

Not all common thinking and reading tasks are found in equal proportion in each job or across occupational areas.

This study is representative of only those jobs examined in this study.

The Literacy Task Analyses were done from the perspective of seeking commonalities across jobs and occupational areas.

EVALUATION TECHNIQUES AND RESULTS:

Formative evaluation processes were used to determine that the project was fulfilling the objectives within acceptable timeframes. The positive response from the business community both in regards to the initial request for participation and in regards to the document summarizing the project (See Appendix F), was an indication to the project's success and acted as a summative evaluation. Classroom observation, student feedback, and the results of the diagnostic interviews used as pretests and sample tasks used as posttests all indicated that the classroom implementation of teaching techniques was successful.

G. PROCEDURE FOR DISTRIBUTION:

A summary of the project and its findings was mailed to each employer participant in the project (Appendix G). Copies of this document were also distributed to the Allentown Office of Employment Security and the Allentown-Lehigh Chamber of Commerce.

A copy of this final report will be submitted to AdvancE. In addition, a proposal will be submitted to PAACE mid-winter conference, and an announcement of the project will be submitted to the Allentown-Lehigh Chamber of Commerce and the newsletter of the Small Business Council.

FINDINGS AND IMPLICATONS:

The primary finding of this study is that there appear to be many similar reading and critical thinking tasks across occupational areas. There is also a great deal of common vocabulary. Following is a list of the common skills.

Vocabulary

Exit

Fire Extinguisher

Fire Alarm

No Smoking

Schematics

Maps

Schedules

Time Card/Time Sheet

Reading Skills

- Identify details, labels, numbers and parts from an illustration or picture.
- Identify the components within each section of a schematic diagram.

- Recognize common words and meanings.
- Recognize task-related words with technical meanings.
- Recognize meanings of common abbreviations and acronyms.

Thinking Skills

- Use common knowledge to avoid hazard or injury.
- Apply preventative measures prior to a task to minimize security or safety problems.

This finding is important because it shows that literacy instruction can be workforce functional without being limited to a particular occupation or specific job. The implications of this finding are important for adult educators, employers, and researchers.

Adult educators can design their programs to better meet the needs of an increasing number of students who are seeking to upgrade and enhance their skills for use in the workplace. Workforce functional programs can accommodate a larger variety of students in group situations by building on the commonalities of tasks across occupational areas. Program providers can expand on this common base and create a custom-designed program if needed. The procedures for doing this are the same as the ones described in this study. Workforce literacy programs are an ideal way to integrate critical thinking skills into a meaningful and practical context. This study found that in the entry level positions examined, critical thinking

skills were more important to job success than reading skills. The use of actual or simulated workforce materials appears to ensure the transfer of skills instruction and aids significantly in the retention of those skills. The teaching techniques used in the study appear to be effective and may help students manage their own learning in the workplace because of the similarity of many of these techniques with training methods used in on-the-job training.

Employers will benefit from the findings of this study because it demonstrates that cooperative training programs could be effective and cost efficient for small and mid-sized businesses. Basic skills training in a workforce context for entry level workers could reduce employee turnover and improve employee promotability. Better trained workers are more flexible and can take on more varied job duties. An awareness by employers of the job task demands of entry level positions could lead to better matches between a job's demands and an employee's abilities in the hiring process. Basic skills instruction with a workforce emphasis appears to yield immediately useful results for employees and their employers. Businesses investing money in employee basic skills instruction would be well advised to seek out a provider who could supply an integrated, workforce-functional program.

Researchers will benefit from this study by reviewing its findings and by using them as a departure point for further related research. If commonalities in reading and critical thinking skills can be found across the five occupational areas examined here, could there be commonalities across other occupational areas? Do commonalities exist only in entry-level positions or are there commonalities in other levels across occupational areas? What entry level skills are most valuable in other levels? One of the findings in this study was that entry level positions examined in this study did not require much reading ability but did require critical thinking ability. Is this true of positions beyond the entry level? If not, how is it different and what skills are necessary for job success beyond the entry level? Are the effective teaching techniques described here transferrable to other programs, skills, or situations? These and other questions need to be investigated.

ADDITIONAL FINDINGS:

While this project examined the thinking and reading skills in entry level positions, some additonal information was collected in the process. It was found that communication skills such as speaking and listening were critical to job success in entry level positions because much of the information concerning the job tasks and demands is conveyed verbally by supervisors and coworkers.

Additionally, personal attributes were considered essential to job success. Dependability, attitude toward work, cooperativeness, trustworthiness, and personal hygiene and appearance were all ranked highly by employers. Some jobs involved writing, however, this was generally confined to short notations. Most employers indicated that personal attributes, speaking and listening, and reasoning and thinking were most important to entry level job success with reading and writing ranking fourth and fifth respectively. Employers expressed a greater willingness to train someone with favorable personal attributes and who could communicate and reason effectively. Educators need to convey the importance of personal attributes and communication skills to their students and should include practice in speaking and listening in workforce instruction.

While minimal levels of reading and writing appeared to be adequate for many entry level positions, the same could not be said of second level positons. In many cases, the second level position was a supervisory position where the reliance on reading and writing appears to be much greater. Investigation into the demands of second level positions is necessary and should focus on not only determining the specific nature of the literacy demands of these positions, but also on the differences in the demands of second level positions and those of entry level positions.

It is The Allentown Literacy Council's hope that the findings and implications of this study will assist adult educators, employers, and researchers in designing and delivering basic skills improvement programs which address the needs of the students seeking skills enhancement for employment purposes and in targeting those people who would benefit from such instruction.

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APPENDICES

Appendix A - Sample newsletter flyer and sample letter contacting employers.

Appendix B - Occupational areas by company participation, employer names and job categories.

Appendix C - Data collection forms.

Appendix D - General vocabulary and vocabulary, schematics, reading and thinking tasks.

Appendix E - Instructional Techniques
- Bibliography of Materials
- Student Survey Form

Appendix F - Report sent to participating employers.

Appendix G - Cover letter to report sent to participating employers.

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APPENDIX A

Sample newsletter flyer and sample letter
contacting employers

ALLENTOWN LITERACY COUNCIL

EMPLOYERS WORKING WITH

Health Care/Nurses Aids

Maintenance/Housekeeping

Food Preparation/Food Services

Hotel/Hospitality Services

Machine Operators

The Allentown Literacy Council is in the process of identifying essential skills of entry-level positions in these occupational areas through a grant from the PA Dept. of Education.

HELP US IDENTIFY THE SKILLS YOUR EMPLOYEES NEED TO BE MORE EFFECTIVE.

PARTICIPATE NOW BY CALLING 435-0680

SUITE 209-210
530 HAMILTON STREET
ALLENTOWN, PA 18101
(215) 435-0680

ALLENTOWN LITERACY COUNCIL

October 19, 1990

Dear _____:

The Allentown Literacy Council has received a grant from the PA Department of Education to identify the reading and problem solving skills needed by employees to perform successfully in entry-level positions. Upon identifying these skills, we will incorporate them into lessons for our students to better prepare them for the workforce. In addition, all participating employers will receive a list of the reading and problem solving skills appropriate to the entry-level positions in their businesses.

In order to accomplish this, we need to obtain from you job descriptions and copies of materials your entry-level employees need to read and to respond to. We would appreciate your participation in this project. We would like to speak with you in person and will be calling you soon. If for some reason it would be difficult for us to meet with you, please feel free to send us any information which you feel may be helpful to us.

Pat Richards, the project manager, will be contacting you soon to speak about the project. If you have any questions or wish to have more information about the project prior to her contacting you, please call Pat at 435-0680.

Sincerely,

Linda V. McCrossan, Ed.D.
Executive Director

pde/89159

SUITE 209-210
530 HAMILTON STREET
ALLENTOWN, PA 18101
(215) 435-0680

You Need To Read

APPENDIX B

Occupational areas by company participation,
employer names and job categories

Workforce Literacy Project _ Occupational Areas

Light Industrial and Machine Operator

1. Greif Company
2. Victoria Vogue
3. Cortape
4. Kelly Temps
5. CDI Temps
6. A & Z Industries
7. Daytimers

Health Care - Orderly/ Nursing Assistant.

1. Allentown Hospital
2. Elder Care
3. Liberty Nursing
4. Phoebe-Devitt
5. St. Luke's Hospital
6. Sacred Heart Hospital

Food Preparation

1. The Wood Company
2. Hamilton Plaza
3. Allentown Hospital
4. Holiday Inn
5. Elder Care
6. Phoebe-Devitt
7. St. Luke's Hospital
8. Friendly's Restaurant
9. Creative Learning Center

Hotel/Hospitality

1. Holiday Inn
2. Day's Inn
3. Hamilton Plaza
4. Radisson
5. Friendly's Restaurant

Housekeeping/Maintenance

1. Hamilton Plaza
2. Allentown Hospital
3. Elder Care
4. Holiday Inn
5. Day's Inn
6. Phoebe-Devitt
7. Radisson
8. St. Luke's Hospital
9. Friendly's Restaurant
10. Creative Learning Center

Workforce Literacy Project

Cooperating Businesses and Data Record

Company	Job
Greif Co.	Machine Operator
Wood Co.	Food Prep.
Liberty Nursing	Nursing Asst.
Hamilton Plaza	Housekeeping Food Prep. Dishwasher
Allentown Hosp.	Nursing Asst. Housekeeping Pot Washer Food Service Worker
Elder Care	Home Health Care
Cortape	Machine Operator
Holiday Inn	Dishwasher Housekeeping Server
Kelly Temps	Light Industrial
Victoria Vogue	Machine Operator
CDI Temps	Light Industrial
A&Z Industries	Machine Operator
Radisson	Housekeeping Bus Person
Day's Inn	Housekeeping Bell Man Bus Person Dishwasher
Daytimer's	Light Industrial
Phoebe-Devitt	Nurses Asst Housekeeping Dietary Worker
St. Luke's Hospital	Patient Attendant Aide-Patient Care Tray Passer-Dietary Dishmachine Operator Food Truck Delivery Counter Worker-Oasis Grounds Caretaker

Friendly's Restaurant	Fountain server Grill person Dishwasher Custodial worker
Sacred Heart Hospital	Nursing Assistant
Creative Learning Center	Food Preparation Janitor

APPENDIX C

Data collection forms

Communication and Job Skills

Company: Job Title:

Personal Attributes	Important	Not Important
Cooperativeness		
Attitude toward work		
Dependability		
Trustworthiness		
Personal Appearance		
Personal Hygiene		
Prior Knowledge of Job		

Reading	Important	Not Important
Reading ability		
Ability to follow written directions		
Ability to read signs		
Ability to read instructions		
Ability to read safety regs/warnings		
Ability to read charts, patterns, work specs., blueprints, etc.		

Speaking and Listening	Important	Not Important
Ability to communicate by speaking		
Ability to follow spoken directions		

Reasoning and Thinking	Important	Not Important
Ability to reason & problem solve		
Ability to learn new tasks		
Ability to take on new or add'l jobs		

Writing	Important	Not Important
Ability to communicate by writing		

What other factors are important to job success?

Special Skills required:

Hours per week spent on reading tasks?

Rank order of above categories?

READING MATERIALS

Company:
Job Title:

Job application

New Hire paperwork (forms, I-9, W-4, etc)

Policies and Procedures Handbook

Employee Handbook

Benefits Information (coverage info., insurance forms, etc.)

Orientation materials

Job Description

Payroll and paycheck information (deductions, timecards, etc.)

Job requirements Reading:

Reference or Safety Manuals

Computer screens or print-outs

Written Instructions

Work orders

Labels (address/shipping or product)

Charts, signs, tables, etc

Memoranda, bulletins, notices, brochures, posters, etc.

Newsletters

Other:

Worker/Supervisor Questionnaire

Company:
Job Title:

Are there job tasks which require reading?

Describe them:

How often is the task done?

What material must be read?

What other reading material can be useful in doing this task?

If the material is read incorrectly, would it affect the work or the worker? How?

How long must the information read be remembered for this task before you use the information?

Will the same material be read if the job is to be done the next day? Next week? Next month?

If tomorrow, which part of the material will need to be read again?

APPENDIX D

General vocabulary and vocabulary, schematics, reading and thinking tasks

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

COMMON SAFETY AND POLICY AND PROCEDURE VOCABULARY ACROSS ALL OCCUPATIONAL AREAS

Safety Vocabulary

Ambulance
Caution
Caution - Wet Floor
Caution - Do Not Enter
Caution - Step Down
Watch Your Step
Warning
Danger - Keep Out
Do Not Enter
Use Handrail
Stop
Restricted Area
Do Not Touch
Enter
Exit
Emergency Exit
Poison
No Smoking
Fire Extinguisher
Fire Hose
Fire Alarm
Flammable
Hot
Heavy
No Admittance
Hazard
Hazardous Waste
All Visitors Report To Office
Security Area - I.D. Required
Show I.D.
Employees Must Wash Hands Before Leaving Room
Employees Only
Pull
Push
Wear Safety Glasses
Wear Protective Clothing
Slow
No Parking
Loading Zone

Policy and Procedure Vocabulary

Application
Job Description
Orientation
Probation
Performance Review
Job Review
Salary Review
Merit Raise
Grievance
Time Card
Payroll Deductions
Social Security
Workman's Compensation
Federal Income Tax
State Income Tax
Local Income Tax
Health Insurance
Life Insurance
Disability Insurance
Retirement (401K, IRA)
Credit Union
Sanitation
Appearance
Resignation
Termination
Attendance
Punctuality
Vacation Time
Personal Leave
Sick Time
Medical Leave
Compensation Time
Overtime
Holiday Benefits
Unemployment Compensation
Travel Benefits
Job Advancement
Promotion
Educational Benefits
Leave of Absence
Bereavement Leave
Confidential
Confidentiality
Beneficiary
Affirmative
Equal Opportunity Employer

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

ANALYSIS OF READING AND CRITICAL THINKING SKILLS AND VOCABULARY BY OCCUPATIONAL AREA

LIGHT INDUSTRIAL/MACHINE OPERATOR

Vocabulary

Exit
Fire Extinguisher
Fire Alarm
Caution
Hazard
No Smoking
Measurements & Weights
Temperature Settings
Gauge Readings & Settings (inches and fractions/percentages)

Schematics

Maps
Schedules
Time Card/Time Sheet
Inspection Ticket form
Work Orders (numbers & letters)
Bus Schedule
Operating Instructions (pictorial illustrations)
Hazard Signs/Safety Warnings

Reading Skills

-Identify details, labels, numbers and parts from an
-illustrations or picture.
-Identify the components within each section of a schematic diagram.
-Follow sequenced illustrations or photographs as a guide.
-Isolate a problem component in a schematic and trace it to the cause of the problem.
-Match objects by size, color, or significant marking.
-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meanings of common abbreviations and acronyms.

Thinking Skills

-Determine the presence of a defect or extent of damage.
-Remember specifications.
-Use common knowledge to avoid hazard or injury.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Select appropriate course of action in an emergency.

-Anticipate need.
-Apply information from tables or graphs to locate malfunctions or set a course of action.

HEALTH CARE

Vocabulary

Exit
Fire Extinguisher
Fire Alarm
Names of Departments (x-ray, lab, etc.)
Telephone
Wet Floor
Caution
No Smoking
Storage
Private
Rest Rooms
Product labels (medicine, cleaning products, etc.)
Names of staff and patients
Medical terminology (frequently used common terms)

Schematics

Maps - Room numbers and configurations
Schedules
Time Card/Time Sheet
Floor work records
Flow sheet (treatment sheet, procedural sheet)

Reading Skills

-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meaning of common abbreviations, acronyms, & proper names.
-Identify factual details or specifications within a text.
-Classify objects by size, color, or significant marking.
-Identify components within each section of a schematic diagram.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Interpret codes and symbols.

Thinking Skills

-Anticipates needs.
-Use common knowledge to avoid hazard or injury.
-Remember "standard" and meet it.
-Select appropriate course of action in an emergency.
-Apply preventative measures prior to a task to minimize security or safety problems.

-Ability to prioritize.
-Organize information from multiple sources into a sequenced series of events.

FOOD PREPARATION

Vocabulary

Exit
Fire Alarm
Fire Extinguisher
Caution
Wet Floor
Hazardous Substance labels (cleaning products, etc.)
Name of various food items
Special Diet
Product labels
Weights & Measures
Temperatures
No Smoking
Rest Rooms
Wash Hands
Wear Gloves

Schematics

Schedule
Pictorial Illustrations
Time Card/Time Sheet
Hazard Signs/Safety Warnings
Maps - Room numbers and configurations

Reading Skills

-Follow sequenced illustrations or photographs as a guide.
-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meaning of common abbreviations and acronyms.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Match objects by size, color, or significant marking.
-Identify the components within each section of a schematic diagram.
-Identify factual details or specifications within a text.

Thinking Skills

-Understand and remember a systematic approach.
-Remember and carry out hygiene instructions.
-Use common knowledge to avoid hazard or injury.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Follow detailed, sequential directions to complete a task.
-Anticipate needs.

HOTEL/HOSPITALITY

Vocabulary

Exit
Rest Rooms
Directory (rooms and locations)
Telephone
Names of Banquet & Conference Rooms
Fire Alarm
Fire Extinguisher
No Smoking
Wet Floor
Do Not Disturb

Schematics

Maps (room numbers & configurations, room settings, etc.)
Schedules
Time Card/Time Sheet

Reading Skills

-Identify the components within each section of a schematic design.
-Identify the components within each section of a schematic diagram.
-Identify details, numbers, labels, and parts from an illustration or picture.
-Recognize common words and meanings.
-Recognize task-related words and technical meanings.
-Recognize meaning of common abbreviations and acronyms.

Thinking Skills

-Understand and remember a systematic approach and a particular order of events.
-Follow detailed sequential directions to complete a task.
-Anticipate needs.
-Determine presence of a defect or extent of damage.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Use common knowledge to avoid hazard or injury.

HOUSEKEEPING/MAINTENANCE

Vocabulary

Do not disturb
Exit
Fire Alarm
Fire Extinguisher
Product labels
Storage
Directory
Telephone
Rest Rooms
Name of Banquet Rooms & Conference Rooms
No Smoking
Wet Floor
Caution
Room needs cleaning

Schematics

Maps - room configurations
Schedules
Time Card/Time Sheet

Reading Skills

-Recognize common words and meanings.
-Recognize common abbreviations and acronyms and proper names.
-Recognize task-related words.
-Identify the components within each section of a schematic diagram.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Match objects by size, color, or significant marking.
-Classify objects by size, color, or significant marking.
-Interpret codes and symbols.

Thinking Skills

-Use common knowledge to avoid hazard or injury.
-Select an appropriate course of action in an emergency.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Recognizing a problem and taking appropriate action.
-Anticipate needs.
-Remember a "standard" and meet it.
-Remember and carry out orders or instructions.

APPENDIX E

Instructional Techniques
Bibliography Materials
Student Survey Form

INSTRUCTIONAL TECHNIQUES

Direct Instruction - the instructor introduces each lesson or task in a straightforward manner explaining the objectives of the lesson, defining its purpose, and stating its utility. The instructor then puts it into a context which the learner understands or with which the learner is familiar. The learner practices the skill for mastery and reinforcement. Direct instruction is a method of instruction adults often prefer because it is efficient and concrete providing them with an opportunity to apply what they have learned.

Dividing a Process into Procedural Steps - Learners often benefit from guidance in sequencing and in breaking a complex or multi-faceted task down into manageable parts. Understanding how to reason through the process aids in mastery and retention as does breaking it into sequential steps. This also helps conceptualization skills by allowing the learner to see how the parts relate to one another and to the whole process.

Modeling - The instructor illustrates how to correctly perform or complete a task. The learner can use this model as a standard of performance when practicing the task.

Demonstration with "think aloud" - This technique is similar to modeling. The instructor actually performs the task and talks about the thought processes being used to do so. This allows the learner to understand how one reasons through a task and how one applies various skills to the successful performance of the task.

Metacognitive Strategies - The instructor helps the learner manage and monitor the learner's thought processes. Some of the metacognitive strategies used in this project were self-questioning and mental activity monitoring. Consciously thinking about the component parts of a task helps the learner successfully complete all parts of the task. Helping the learner use prior knowledge and experience as a context for new learning aids in the acquisition and retention of new skills.

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pde/89161

Parent Item #: CO 256 201000
Description : 1 MIL POLYESTER / TSR YELLOW 1" X 72 YARDS

Instructions
J 2000 / USE A 12" KNIFE, 1/32 BK BVL, KNF OFF, MDRL 400

Component #	Description	U/M	# Rt/Hr	Qty.	Est. Cost
PE 256 LOG	1 MIL POYESTER / TSR YELLOW	SY/C	N/A	167	29225.00
LABOR_AA003	Andrew D. Anderson	N/A	5	1	5.00
MACHINE_2	XYZ Electrical Saw (cuts vi	N/A	15	1	2.00
			** Total **		29232.00

TIME AND ATTENDANCE REPORT

Please Press Firmly

DATE			DAY	TIME IN	LUNCH TIME OUT	LUNCH TIME IN	TIME OUT	TRAINING HRS.	COMMENTS
MO	DAY	YR		AM/PM	AM/PM	AM/PM	AM/PM		
			Mon						
			Tue						
			Wed						
			Thr						
			Fri						
TOTALS									

DATE			DAY	TIME IN	LUNCH TIME OUT	LUNCH TIME IN	TIME OUT	TRAINING HRS.	COMMENTS
MO	DAY	YR		AM/PM	AM/PM	AM/PM	AM/PM		
			Mon						
			Tue						
			Wed						
			Thr						
			Fri						
TOTALS									

PAYROLL DEPARTMENT USE ONLY: _____

DATE RECEIVED BY _____

RECEIVED BY _____

_____

Signature Date

(USE INK ONLY)

NAME _____ CLOCK NO. _____

LAST FIRST MIDDLE

PHONE DEPARTMENT

ATTENDANCE RECORD

19 ____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
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JUL																																
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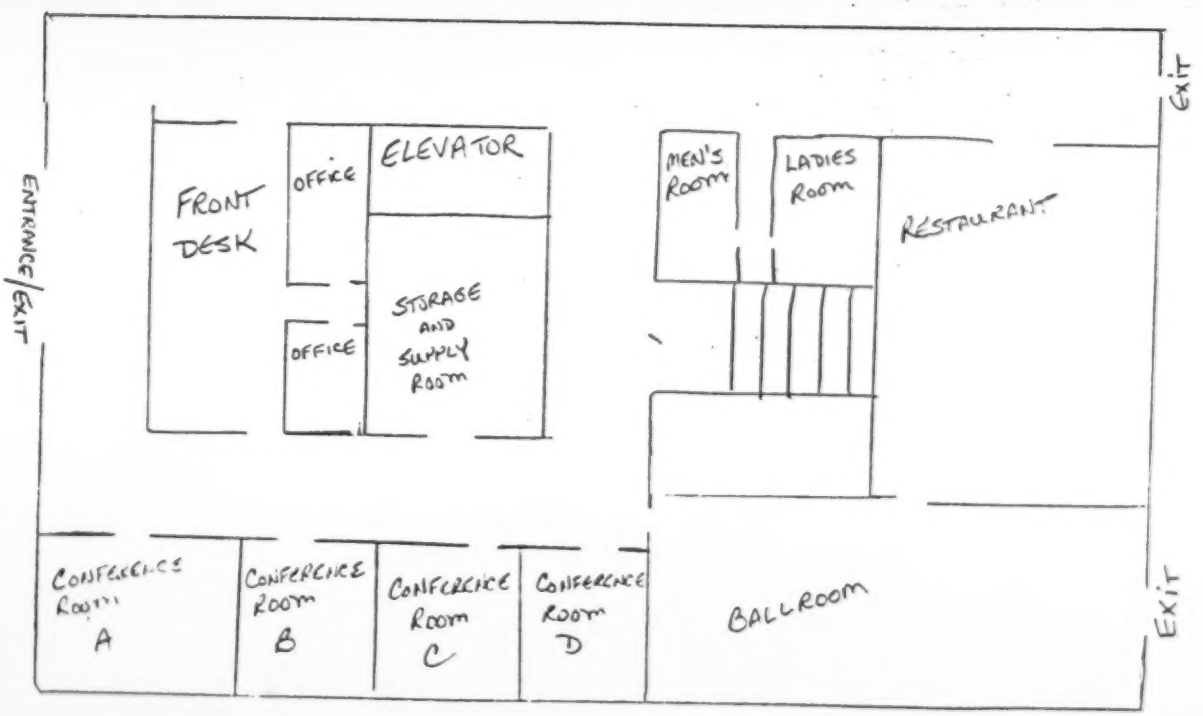
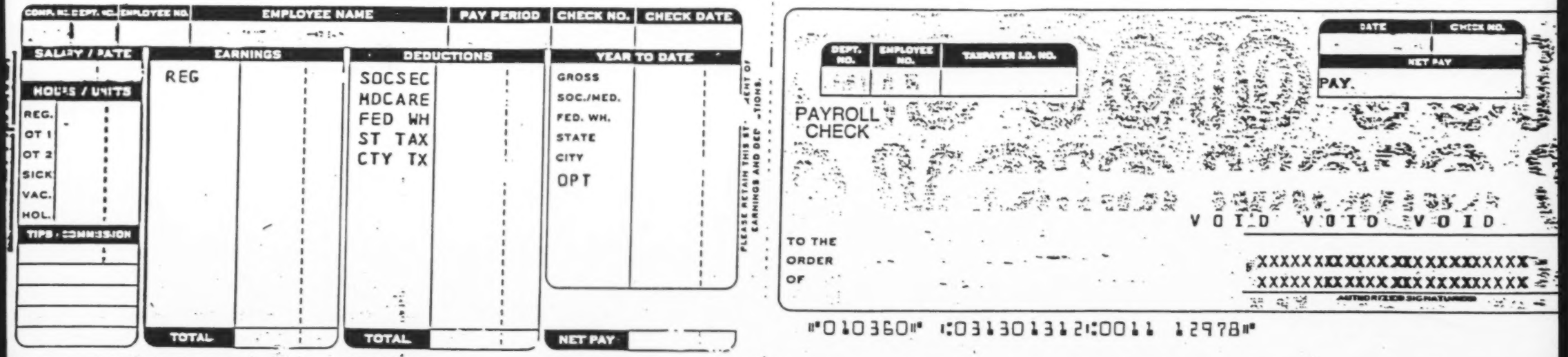
OCT																																
NOV																																
DEC																																

X - EXCUSED S - SICK V - VACATION NX - NOT EXCUSED J - JURY DUTY

CODE O - OTHER (EXPLAIN BY DATE ON REVERSE SIDE)

Form #08300 Amsterdam Printing and Litho Corp., Amsterdam, N. Y. 12010


ENTRANCE/EXIT
FRONT DESK
OFFICE
ELEVATOR
OFFICE
STORAGE AND SUPPLY ROOM
MEN'S ROOM
LADIES ROOM
RESTAURANT
EXIT
CONFERENCE ROOM A
CONFERENCE ROOM B
CONFERENCE ROOM C
CONFERENCE ROOM D
BALLROOM
EXIT



BEST COPY AVAILABLE

QUESTIONNAIRE

PLEASE CIRCLE YES OR NO FOR EACH ITEM SO THAT THE THINGS THAT ARE MOST IMPORTANT TO YOU CAN BE DONE IN CLASS.

LOOKING FOR A JOB

1.	Reading the Help Wanted advertisements	YES	NO
2.	Writing a letter of application	YES	NO
3.	Filling out an employment application	YES	NO
4.	Reading a bus schedule	YES	NO

FIRST DAYS ON THE JOB

1.	Filling out a tax withholding form (W-4)	YES	NO
2.	Filling out a proof of citizenship form (I-9)	YES	NO
3.	Filling out health insurance enrollment forms	YES	NO
4.	Filling out a time sheet	YES	NO
5.	Understanding a work schedule	YES	NO

ON THE JOB

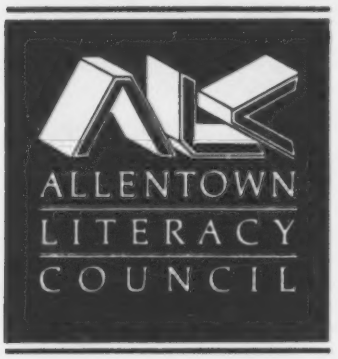
1.	Reading safety signs, warnings, instructions	YES	NO
2.	Understanding abbreviations and symbols	YES	NO
3.	Reading a map of the building	YES	NO
4.	Reading payroll deduction forms	YES	NO
5.	Reading a work order	YES	NO
6.	Reading instructions	YES	NO
7.	Reading address labels or shipping labels	YES	NO
8.	Reading and understanding step-by-step directions	YES	NO
9.	Understanding pictures or illustrations	YES	NO

WHAT OTHER THINGS DO YOU WANT TO DO IN CLASS THAT WOULD HELP YOU WITH YOUR JOB OR WITH FINDING A JOB?

WHAT THINGS DO YOU WANT TO DO IN CLASS THAT WOULD HELP YOU GET A DIFFERENT OR BETTER JOB?

APPENDIX F

Report sent to participating employers



WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS IN FIVE OCCUPATIONAL AREAS

DR. LINDA V. McCROSSAN
EXECUTIVE DIRECTOR

MS. PATRICIA O. RICHARDS
PROJECT MANAGER

APRIL 1991

SUITE 209-210
530 HAMILTON STREET
ALLENTOWN, PA 18101
(215) 435-0680

You Need To Read

The activity which is the subject of the report was supported in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education or the PA Department of Education and no official endorsement by these agencies should be inferred.

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

THE ALLENTOWN LITERACY COUNCIL

The Allentown Literacy Council, in its 14th year, has 500 students, 70% of whom are taught in group instruction and 30% of whom are taught by tutors. Approximately 65% of its students are employed in small businesses in the community. Programs provide reading, writing, and math instruction to adults and provide language instruction to non-English speakers. The programs are designed to meet the needs of students, businesses, and the community by offering group and individual instruction.

The Allentown Literacy Council is a charitable, community-based organization with a professional staff having more than 60 years of experience teaching adults and with a corps of trained and certified volunteers. More than 50% of its budget is funded by contributions from individuals, community organizations, businesses, and council-sponsored fund-raising events. The Council also receives grants from the Community Development Block Grant Program of the City of Allentown, the PA Department of Education, Lehigh County Commissioners, the Trexler Foundation, and other foundations. A portion of the Council's overall budget is funded by the United Way in Lehigh County.

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

OVERVIEW OF THE PROJECT

In the summer and fall of 1990, The Allentown Literacy Council began a workforce literacy project aimed at making its instructional programs more effective. With the help of the Allentown Office of Employment Security, the Council identified five growing occupational areas: Light Industrial/Machine Operator, Health Care, Food Preparation, Hotel/Hospitality, and Housekeeping/Maintenance. Entry-level positions in small and mid-sized businesses were chosen to be analyzed because 65% of the Council's students are employed in companies of this type. The Allentown-Lehigh Chamber of Commerce and the Allentown Office of Employment Security helped the Council target companies for participation. The response was very positive. Owners, managers, and human resources specialists were interviewed about the entry-level positions in their companies and data on 43 jobs were collected. Job duties and materials were analyzed to determine the required reading and thinking skills. Vocabulary, schematics (charts, graphs, forms, maps, etc.), reading tasks, and thinking and reasoning tasks were identified. The goal was to find tasks common to all entry-level positions in all of the occupational areas. When these were identified, teaching techniques and materials were developed for the Council's classes. The addition of these techniques and materials will make the classes more effective by adding a functional workforce literacy component for low-level literates.

IMPLICATIONS OF THE FINDINGS

What the findings of this project indicate is that entry-level positions may not place great reading demands on employees but that thinking and reasoning skills are important.

It also appears that there are many similar reading tasks and much common vocabulary across occupational areas. This is important because it shows that literacy instruction can be workforce functional without being limited to a particular occupation. Small businesses could benefit from this finding in that cooperative training efforts could be developed for employees from different companies who need basic skills instruction. Cooperative training efforts among small businesses could be more cost effective and more feasible.

Turnover could be reduced as a result of employees having the ability to perform these reading and thinking skill demands of entry-level positions. Employees who lack the skills to be successful in entry-level positions cannot move into more demanding second-level jobs within the company.

When businesses are writing job descriptions and developing job tasks, it would do well to keep in mind that without basic skills, little or no job flexibility is possible. Low skill levels make taking on new job tasks very difficult for employees.

While not a formal part of this project, speaking and listening skills are important to success in entry-level positions. Both of these skills can be taught. Basic math skills are also very important.

As a result of this project, the Council has been able to develop teaching materials and techniques which will help students gain the necessary skills to succeed in the workplace. Because so many of the reading and thinking tasks are similar across occupational areas, customized workforce instruction can be offered to individuals in small group classes.

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

COMMON SAFETY AND POLICY AND PROCEDURE VOCABULARY ACROSS ALL OCCUPATIONAL AREAS

Safety Vocabulary

Ambulance
Caution
Caution - Wet Floor
Caution - Do Not Enter
Caution - Step Down
Watch Your Step
Warning
Danger - Keep Out
Do Not Enter
Use Handrail
Stop
Restricted Area
Do Not Touch
Enter
Exit
Emergency Exit
Poison
No Smoking
Fire Extinguisher
Fire Hose
Fire Alarm
Flammable
Hot
Heavy
No Admittance
Hazard
Hazardous Waste
All Visitors Report To Office
Security Area - I.D. Required
Show I.D.
Employees Must Wash Hands Before Leaving Room
Employees Only
Pull
Push
Wear Safety Glasses
Wear Protective Clothing
Slow
No Parking
Loading Zone

Policy and Procedure Vocabulary

Application
Job Description
Orientation
Probation
Performance Review
Job Review
Salary Review
Merit Raise
Grievance
Time Card
Payroll Deductions
Social Security
Workman's Compensation
Federal Income Tax
State Income Tax
Local Income Tax
Health Insurance
Life Insurance
Disability Insurance
Retirement (401K, IRA)
Credit Union
Sanitation
Appearance
Resignation
Termination
Attendance
Punctuality
Vacation Time
Personal Leave
Sick Time
Medical Leave
Compensation Time
Overtime
Holiday Benefits
Unemployment Compensation
Travel Benefits
Job Advancement
Promotion
Educational Benefits
Leave of Absence
Bereavement Leave
Confidential
Confidentiality
Beneficiary
Affirmative
Equal Opportunity Employer

WORKPLACE ESSENTIALS: READING AND THINKING SKILLS IN ENTRY-LEVEL POSITIONS

ANALYSIS OF READING AND CRITICAL THINKING SKILLS AND VOCABULARY BY OCCUPATIONAL AREA

LIGHT INDUSTRIAL/MACHINE OPERATOR

Vocabulary

Exit
Fire Extinguisher
Fire Alarm
Caution
Hazard
No Smoking
Measurements & Weights
Temperature Settings
Gauge Readings & Settings (inches and fractions/percentages)

Schematics

Maps
Schedules
Time Card/Time Sheet
Inspection Ticket form
Work Orders (numbers & letters)
Bus Schedule
Operating Instructions (pictorial illustrations)
Hazard Signs/Safety Warnings

Reading Skills

-Identify details, labels, numbers and parts from an -illustrations or picture.
-Identify the components within each section of a schematic diagram.
-Follow sequenced illustrations or photographs as a guide.
-Isolate a problem component in a schematic and trace it to the cause of the problem.
-Match objects by size, color, or significant marking.
-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meanings of common abbreviations and acronyms.

Thinking Skills

-Determine the presence of a defect or extent of damage.
-Remember specifications.
-Use common knowledge to avoid hazard or injury.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Select appropriate course of action in an emergency.

-Anticipate need.
-Apply information from tables or graphs to locate malfunctions or set a course of action.

HEALTH CARE

Vocabulary

Exit
Fire Extinguisher
Fire Alarm
Names of Departments (x-ray, lab, etc.)
Telephone
Wet Floor
Caution
No Smoking
Storage
Private
Rest Rooms
Product labels (medicine, cleaning products, etc.)
Names of staff and patients
Medical terminology (frequently used common terms)

Schematics

Maps - Room numbers and configurations
Schedules
Time Card/Time Sheet
Floor work records
Flow sheet (treatment sheet, procedural sheet)

Reading Skills

-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meaning of common abbreviations, acronyms, & proper names.
-Identify factual details or specifications within a text.
-Classify objects by size, color, or significant marking.
-Identify components within each section of a schematic diagram.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Interpret codes and symbols.

Thinking Skills

-Anticipates needs.
-Use common knowledge to avoid hazard or injury.
-Remember "standard" and meet it.
-Select appropriate course of action in an emergency.
-Apply preventative measures prior to a task to minimize security or safety problems.

-Ability to prioritize.
-Organize information from multiple sources into a sequenced series of events.

FOOD PREPARATION

Vocabulary

Exit
Fire Alarm
Fire Extinguisher
Caution
Wet Floor
Hazardous Substance labels (cleaning products, etc.)
Name of various food items
Special Diet
Product labels
Weights & Measures
Temperatures
No Smoking
Rest Rooms
Wash Hands
Wear Gloves

Schematics

Schedule
Pictorial Illustrations
Time Card/Time Sheet
Hazard Signs/Safety Warnings
Maps - Room numbers and configurations

Reading Skills

-Follow sequenced illustrations or photographs as a guide.
-Recognize common words and meanings.
-Recognize task-related words with technical meanings.
-Recognize meaning of common abbreviations and acronyms.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Match objects by size, color, or significant marking.
-Identify the components within each section of a schematic diagram.
-Identify factual details or specifications within a text.

Thinking Skills

-Understand and remember a systematic approach.
-Remember and carry out hygiene instructions.
-Use common knowledge to avoid hazard or injury.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Follow detailed, sequential directions to complete a task.
-Anticipate needs.

HOTEL/HOSPITALITY

Vocabulary

Exit
Rest Rooms
Directory (rooms and locations)
Telephone
Names of Banquet & Conference Rooms
Fire Alarm
Fire Extinguisher
No Smoking
Wet Floor
Do Not Disturb

Schematics

Maps (room numbers & configurations, room settings, etc.)
Schedules
Time Card/Time Sheet

Reading Skills

-Identify the components within each section of a schematic design.
-Identify the components within each section of a schematic diagram.
-Identify details, numbers, labels, and parts from an illustration or picture.
-Recognize common words and meanings.
-Recognize task-related words and technical meanings.
-Recognize meaning of common abbreviations and acronyms.

Thinking Skills

-Understand and remember a systematic approach and a particular order of events.
-Follow detailed sequential directions to complete a task.
-Anticipate needs.
-Determine presence of a defect or extent of damage.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Use common knowledge to avoid hazard or injury.

HOUSEKEEPING/MAINTENANCE

Vocabulary

Do not disturb
Exit
Fire Alarm
Fire Extinguisher
Product labels
Storage
Directory
Telephone
Rest Rooms
Name of Banquet Rooms & Conference Rooms
No Smoking
Wet Floor
Caution
Room needs cleaning

Schematics

Maps - room configurations
Schedules
Time Card/Time Sheet

Reading Skills

-Recognize common words and meanings.
-Recognize common abbreviations and acronyms and proper names.
-Recognize task-related words.
-Identify the components within each section of a schematic diagram.
-Identify details, labels, numbers, and parts from an illustration or picture.
-Match objects by size, color, or significant marking.
-Classify objects by size, color, or significant marking.
-Interpret codes and symbols.

Thinking Skills

-Use common knowledge to avoid hazard or injury.
-Select an appropriate course of action in an emergency.
-Apply preventative measures prior to a task to minimize security or safety problems.
-Recognizing a problem and taking appropriate action.
-Anticipate needs.
-Remember a "standard" and meet it.
-Remember and carry out orders or instructions.

APPENDIX G

Cover letter to report sent to
participating employers

ALLENTOWN LITERACY COUNCIL

April 15, 1991

Dear :

Enclosed is a list of the reading and thinking skills which are common to entry-level positions in these five occupational areas: Light Industrial/ Machine Operator, Health Care, Hotel/Hospitality, Food Preparation, and Housekeeping/Maintenance. Not all of the positions in these occupational areas require the same degree or combination of skills, but it appears that these skills are represented in all of the positions examined.

With this information, a workforce component has been added to our Adult Basic Skills classes. This will serve to enhance the functional nature of the classes and will expand the relevance of the classes for our students. Increased student skills will ultimately and positively affect the Lehigh Valley and its economic well-being.

We appreciate your assistance in this project. If you have any questions or would like to discuss the findings, please call me.

Sincerely,

Patricia Richards
Project Manager

pde/89158

SUITE 209-210
530 HAMILTON STREET
ALLENTOWN, PA 18101
(215) 435-0680

You Need To Read